

(19) *Otomys laminatus*.

*Otomys laminatus*, Thos. & Schw. P. Z. S. 1905, i. p. 267.

4. 5. 1. 45; 4. 8. 31. 5. Sibudeni, Zululand. (Rudd Exploration.)

An *Otomys* rather larger than typical *irroratus* with the colouring of southern specimens of that species. The dimensions are:—

Head and body 180 mm.; tail 120; hind foot 30; ear 22.

Skull: greatest length 43; basilar length 35; zygomatic breadth 23; length of upper molar series 10; bullæ 7.5.

The extraordinary multiplication of laminæ in  $m_1$  and  $m^2$  distinguishes this species at a glance from any other known *Otomys*.

XXXVIII.—On the Genus *Cercocebus*, with a Key to the known Species. By R. I. POCKOCK, F.L.S., F.Z.S., Superintendent of the Zoological Society's Gardens.

IN Trouessart's Cat. Mamm., Suppl. p. 15 (1904), the described species and subspecies of *Cercocebus* are referred to two subgeneric groups, *Cercocebus* (s. s.) and *Leptocebus*. The latter name appears here for the first time in literature to replace *Semnocebus*, Gray (nec Lesson), restored by Mr. Lydekker for *C. albigena*, Gray, on the strength of the blackness of the eyelids and the presence of an upstanding crest on the crown of the head. Although considerable latitude in opinion as to what constitutes a generic or subgeneric character must be allowed, there seems to me to be no particular reason for regarding elongation of the hairs on the crown as of higher systematic value than elongation of those on the brow, the cheeks, or the end of the tail, features which, happily, no one has as yet claimed to be more than of specific importance within the group.

As for the whiteness of the eyelids, this is most pronounced in the western species (*C. lunulatus*, *æthiopicus*, *fuliginosus*), much less marked, or, according to Mr. Lydekker himself, sometimes absent, in specimens referred to *C. Hagenbecki*, and also, according to the same author, absent in *C. albigena Rothschildi*. Moreover, in *C. congicus* and *C. Hamlyni* the eyelids are white, and, at least in *C. Hamlyni*, whiter than the skin of the face. Yet these two species are certainly more nearly related to *C. albigena Rothschildi* than to any one of the three typically white-eyelidded species.

It was formerly held, even by authors familiar with *C. fuliginosus*, that uniformity in the colour of the hair, or, to be accurate, the absence of the subapical pale annuli so common in the hairs of *Cercopithecus*, was characteristic of the genus *Cercocebus*, yet in *C. fuliginosus* there is a patch on the crown of the head due to a broad yellowish area on the hairs of this region; and since the discovery of *C. galeritus*, *C. agilis*, and *C. chrysogaster*, speckled species all three, it has been tacitly admitted that the absence of the speckling has only a specific importance.

So far, then, as the colour of the hair and of the eyelids is concerned, a gradation may be traced between the species debarring generic or subgeneric subdivision even on the part of those wishing to attach such weight to the particulars in question; and it appears to me there is just as much or as little reason for regarding the elongated whiskers of *C. congeticus*, or the brow-fringe of typical *C. albigena*, or the long and parted scalp-hairs of *C. galeritus* as supplying a basis for subgenera as for considering the crown-tuft of *C. albigena* to have that value. The truth is, if the genus *Cercocebus* be divided into subgenera at all, it may with as much justification be split into three or four as into two. But since no beneficial end is, in my opinion, served by giving subgeneric names to isolated species or groups of species in so small and, comparatively speaking, homogeneous a genus as *Cercocebus*, and useful names are thereby put out of court for other nomenclatural purposes, I propose to regard *Leptocebus* as a genuine synonym of *Cercocebus* \*.

### 1. The Sooty Mangabey.

*Cercocebus fuliginosus*, Geoff.

*Loc.* Sierra Leone and Liberia.

### 2. The White-crowned Mangabey.

*Cercocebus lunulatus*, Temm.

*Cercocebus aethiops*, Geoffroy, and of recent authors; nec *Simia aethiops*, Linn.

*Cercocebus lunulatus*, Temminck, Esquiss. Guin. p. 37 (1853); de Winton, in Anderson's Mammals of Egypt, p. 15 (1902).

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\* The pity of introducing new names like *Leptocebus* into a catalogue compiled by an author who cannot claim an intimate acquaintance even with all the genera, much less with all the species he records, is well exemplified by the case under consideration; for one of the alleged species, *Hagenbecki*, figures in the subgenus *Cercocebus*, and another, *agilis*, in *Leptocebus*; yet the two names were in all probability applied to specimens only subspecifically distinct from each other.

*Loc.* Gold Coast.

In Trouessart's Catalogue (1904) and, I believe, in all previous literature this species figured as *athiops*, Linn.; but since, as Mr. de Winton pointed out, this name was originally given to a species of the genus *Cercopithecus*, it cannot stand for the mangabey in question, for which *lunulatus* seems to be the correct title.

### 3. The White-collared Mangabey.

*Cercocebus athiopicus*, F. Cuv.

*Cercopithecus athiopicus*, F. Cuvier, Mamm. ii. livr. xxxv. (1821).

*Cercocebus collaris*, Gray, List Mamm. Brit. Mus. p. 7 (1843); and of subsequent authors.

*Loc.* Nigeria, Cameroons, and French Congo.

Although this species is usually known by the appropriate title "*collaris*," the oldest available name seems to be *athiopicus*.

### 4. The Yellow-bellied Mangabey.

*Cercocebus chrysogaster*, Lydd.

*Cercocebus chrysogaster*, Lydekker, Novit. Zool. vii. p. 279, pl. iii. (1900).

*Loc.* Congo: exact area unknown.

I have seen a few living specimens of this species, but Mr. Rothschild has kindly afforded me the opportunity of examining the type, which lived for about one year in the Zoological Gardens. This may account for certain discrepancies between the description and the specimen. Between the drawing up of the description which was published on Aug. 20th, 1900, and the death of the specimen in February 1901 certain colour-changes must presumably have taken place in the hair, for it is asserted that the speckling disappears on the flanks and outer sides of the limbs, which tend to slate-grey, and that the inner surface of the limbs is rather paler than the outer surface. In the specimen at the present time the flanks and outer sides of the limbs down to the hands and feet are distinctly speckled, though not so strongly as the head and back, and the inner surface of the limbs is orange like the lower surface of the head and body, though paler. The describer's statement that this species differs from all other species of *Cercocebus* as well as from all species of *Cercopithecus* in the bright orange coloration of the under surface was made in forgetfulness of the fact that Pousargues had already ascribed a similar coloration to the belly of

*Cercocebus agilis*, and that *Cercopithecus Wolfsi*, *Grayi*, *pogonius*, and *nigripes* have been known for many years to be so coloured below\*. My only reason for commenting now on the fact is the great interest attaching to the similarity in the colouring in the lower parts in all these monkeys, which inhabit, broadly speaking, the same area of tropical West Africa, namely the Congo. There must be an explanation of this, but I am unable to suggest what it may be.

### 5. Hagenbeck's Mangabey.

#### *Cercocebus Hagenbecki*, Lydd.

*Cercocebus Hagenbecki*, Lydekker, Novit. Zool. vii. p. 594 (1900); id. *op. cit.* viii. pl. i. fig. 1 (1901).

*Loc.* Upper Congo: exact area unknown.

I am indebted to Mr. Rothschild for the chance of seeing the type of this species. On the forehead, rather less than an inch behind the brow, there is a very conspicuous parting, whence the hairs radiate, those directed forwards forming a conspicuous postsuperciliary fringe. This important feature, attesting close relationship between *C. Hagenbecki* and *C. agilis*, is not mentioned in the description and only imperfectly suggested in the figure. The prevailing colour is a smoky grey above, relieved on the head, whiskers, neck, shoulders, and fore part of the back by the yellowish annulation of the hairs. These annuli practically die out on the sides of the body, the outer sides of the legs, and on the tail, which is merely indistinctly speckled in its basal portion above. The throat, chest, belly, and the inner sides of the limbs are dirty greyish white. There is a complete absence in the hair of the brown or fawn or rusty yellow hue mentioned by the two principal describers of *C. agilis*. It is solely on this account that I separate the two forms specifically, although strongly suspecting they will ultimately prove to be at most merely local races (that is to say, subspecies) of one and the same species. But of this there is as yet no proof.

According to Mr. Lydekker, the eyelids were black in the living type specimen, whereas another example living in the Gardens at the same time had them flesh-coloured. In the living specimens I have seen they are neither flesh-coloured nor black, but somewhat greyish—that is to say, decidedly darker than in *C. aethiopicus*, for example. I suspect they are pale in the young and gradually darken with age.

\* The rufous belly of *C. erythrogaster* must also be remembered in this connexion.

In the speckling of the coat and the appearance and gradual extension of the yellow of the underside a gradation may be traced in the order named between *C. fuliginosus*, *Hagenbecki*, *agilis*, and *chrysogaster*, whereas in the direction of growth of the hairs on the head *C. chrysogaster* resembles *C. fuliginosus*.

#### 6. Agile Mangabey.

##### *Cercocebus agilis*, A. Rivière.

*Cercocebus agilis*, A. Rivière, Rev. Sc. sér. 3, xii. p. 15 (1886); Pousargues, Ann. Sci. Nat., Zool. (8) iii. pp. 229-235 (1896); Trouessart, Le Naturaliste, 1897, p. 9.

*Loc.* French Congo: confluence of the Oubangui and the Congo; "Poste des Ouaddas" (according to Pousargues).

The specimen, now in the Paris Museum, to which Rivière gave the name *Cercocebus agilis*, without adequate diagnosis, was subsequently described by both Pousargues and Trouessart. I have not seen any specimen which exactly fits the descriptions, though the latter apply pretty closely to mangabeys we commonly receive from the Congo and call *C. Hagenbecki*. The arrangement of the hairs on the forehead is the same and the speckling of the fur also, but the general tint is apparently different in the two; for example, Trouessart says that the hairs of the head and back are more distinctly annulated than those of the sides, so that the tint passes insensibly into fawn-brown ("fauve-brun"), then into clear fawn, then into white under the belly. And according to Pousargues the hairs of the upper parts are dark brown ("brun sombre") and marked on the distal third with two yellowish-green annuli especially distinct upon the head, neck, and arms, much less defined upon the cheek, shoulders, back, sides, and outer face of the legs; the hairs of the chest and belly are scanty and yellowish red at the extremity, but the throat and the inner sides of the arms and legs are silvery grey. The discrepancies between the two descriptions taken by two authors of repute from the same specimen are difficult to reconcile. They are also highly instructive as emphasizing the magnitude of the personal equation to be reckoned with in judging of species from published diagnoses. The reddish-yellow ("jaune roussâtre") hue of the chest and belly must be very faint, one would imagine, to admit of Trouessart's failing to detect it and describing the belly as white, unless his examination was made by gas- or candle-light. That Pousargues was probably correct may be inferred from the circumstance that he saw four specimens in addition to the

type, making a total of two adult males and one adult and two young females.

### 7. Helmeted Mangabey.

#### *Cercocebus galeritus*, Pet.

*Cercocebus galeritus*, Peters, Mon. Akad. Berlin, 1879, p. 830, pls. i.<sup>o</sup> & iii.; Matschie, Säugeth. Deutsch. Ost-Afr. p. 145 (1895); Pousargues, Ann. Sci. Nat. (8) iii. pp. 229-235 (1897).

*Loc.* Brit. E. Africa: Tana River.

This species is known to me only from the figure and description published by Peters and from the remarks upon it Matschie and Pousargues have published.

The general colour both above and below seems to resemble that of *C. agilis*; but the arrangement of the hair on the crown of the head is quite different from that of *C. agilis* and *C. Hagenbecki*. Judging from the figure, which, according to Matschie, quoted by Pousargues, is correct, the parting is not, as in those species, a small circular area from which the hair radiates, but almost Y-shaped; the hairs on the forehead turn forwards over the brows and are separated by a transverse parting running from temple to temple from the hairs of the top of the head, which are long and directed outwards from a median longitudinal parting, so that their ends overhang, like a roof, the tops of the ears. The description Pousargues gives of this arrangement does not express at all clearly, in my opinion, what the illustration in Peters's paper shows. Trouessart's interpretation is much more in keeping with the figure. But the two species, *C. agilis* and *galeritus*, are, I should say, much less nearly related than these French authors believed.

### 8. The Black Mangabey.

#### *Cercocebus albigena*, Gray.

*Presbytes albigena*, Gray, P. Z. S. 1850, p. 77.

*Loc.* Basin of the Congo and E. Africa (Uganda, Tanganyika).

Mr. Lydekker (Nov. Zool. vii. pp. 594, 596, 1900) admits the following subspecies of this form:—

*albigena*, Gray, P. Z. S. 1850, p. 77, pl. xvi.

*Loc.* French Congo.

*aterrimus*, Oudemans, Zool. Gart. xxxi. p. 267 (1890).

*Loc.* Stanley Falls; north or right bank of Congo.



*Rothschildi*, Lydd. Nov. Zool. vii. pp. 595-596 (1900), and viii. pl. i. fig. 2 (1901).

*Loc.*?

*Johnstoni*, id. *loc. cit.* pp. 595-596.

*Loc.* Lake Tanganyika (northern extremity).

The best-marked of these forms appears to be *Rothschildi*, of which I have seen no specimens.

The remaining examples examined and named by Mr. Lydekker are in the Natural History Museum, as well as three others received since his paper was written. Two of these three are from Budzi (3000 feet) in Uganda; the third is labelled "Cameroons," but this locality is, I think, open to grave suspicion. This specimen is long-coated. The mantle on the nape and shoulders is brown strongly tinged with iron-grey. There is also a considerable quantity of grey in the hair on the fore part of the chest and outer side of the thigh. Except that there is more grey in the coat, this example is very like the type of *albigena*, which is young. I believe it represents the adult phase of that species, and Mr. Lydekker has given it the name *albigena*. In its grey-ness it differs from the two examples from Uganda, in which there is no grey in the brown mantle or on the outer sides of the legs, which are black. One of these specimens is browner than the other and both are rather browner than the type of *Johnstoni*. Nevertheless I believe the three specimens, which appear to be adult, are representatives of one and the same subspecies.

From an examination of all these skins, no two of which are absolutely alike, I am compelled to believe that two, and only two, subspecies are involved, namely a western and an eastern, the former being *albigena* and the latter *Johnstoni*. Neumann identified the eastern form from Uganda as *aterrimus*; but for geographical reasons it appears to me more probable that the type of *aterrimus* was a young example of *albigena*. If so, *aterrimus* falls as a synonym of *albigena*. If, on the other hand, Neumann is right in his determination, *Johnstoni* falls as a synonym of *aterrimus*.

It must be borne in mind that Neumann discovered the young of the Uganda form to be uniformly black (Zool. Jahrb. xiii. p. 533, 1900). From this it may be inferred that the young of the Congo form (*albigena*) is also black. The skins I have seen bear out this inference. Hence, so far as colour is concerned, the type of *aterrimus* might be the young or the brown- or grey-mantled race. It cannot, on

the evidence, be admitted as the representative of a distinct form.

9. Selater's Mangabey.

*Cercocebus congicus*, Selater.

*Cercocebus congicus*, Selater, P. Z. S. 1899, pp. 827-828, fig.

The diagnosis runs as follows:—"Niger, subtùs nudiusculus, cristâ extante longâ nigrâ: genarum pilis productis albis: manibus et pedibus cum facie carneis: mento et pectore albis, ventre nigricante, tibiis albis: brachiis nigris, caudâ albicante. Long. corp. 2, caudæ 3, totâ 5 ped. Angl.

"Hab. Terra Congica."

This species was based upon a single female specimen living in the Antwerp Gardens and believed to have come from the district of Stanley Falls on the Upper Congo.

The reproduced photograph published by Dr. Selater shows that the crest on the head was long and rose nearly vertically from the crown like a column, presenting an appearance quite unlike that of the crest of *C. albigena* or *C. Hamlyni*.

10. Hamlyn's Mangabey.

*Cercocebus Hamlyni*, Pocock.

*Cercocebus Hamlyni*, Pocock, Ann. & Mag. Nat. Hist. 1906, xviii. p. 208, pl. vii.

Loc. Congo: exact locality unknown.

*Key to the Species and Subspecies, showing their apparent Affinity.*

- a. No upstanding tuft of hair on the posterior portion of the crown of the head.
- b. Hairs on body a uniform blackish grey or nearly black, not annulated.
- c. No distinct white collar; summit of head not red-brown.
- d. No white patch on summit of head; lower surface slaty grey ..... *fuliginosus*.
- d<sup>1</sup>. A white patch on summit of head; lower surface whitish ..... *lunulatus*.
- e<sup>1</sup>. A white band extending on each side from the eye beneath the ear on to the back of the head and continued down the nape of the neck; top of head red-brown ..... *athiopicus*.
- b<sup>1</sup>. Hairs, at least on the head, fore limbs, and fore part of the body, distally annulated with yellow, giving a speckled appearance to the coat.
- e. No parting in the hairs on the forehead to form a brow-fringe; throat and inner side of limbs yellow like chest and belly ..... *chrysogaster*.



- e*<sup>1</sup>. A parting in the hairs on the forehead to form a forwardly directed brow-fringe; at least the throat and the inner sides of the limbs not yellow (? in *C. galeritus*).
- f*. Hairs on crown of head short, directed backwards, without median longitudinal parting; no tail-tuft.
- g*. Prevailing colour smoky grey; no yellow on flanks, chest, or belly . . . . . *Hagenbecki*.
- g*<sup>1</sup>. Prevailing colour brown, yellowish on the flanks, chest, and belly. . . . . *agilis*.
- f*<sup>1</sup>. Hairs on crown of head long, separated by a median longitudinal parting, whence they diverge to the right and left, overlapping the tops of the ears; tail apically tufted . . . . . *galeritus*.
- a*<sup>1</sup>. Hair on summit of head forming an upstanding parietal crest or tuft.
- h*. Skin of face, of hands and feet, and the nails black; prevailing colour of coat also black, though brown or iron-grey in parts . . . . . *albigena*.
- i*. Whiskers short; a very distinct superciliary fringe.
- k*. Mantle and chest and outer side of legs brown with grey tinge . . . . . subsp. *albigena*.
- k*<sup>1</sup>. No grey tinge in the hairs of the mantle, chest, and outer side of legs, the latter being black . . . . . subsp. *Johnstoni*.
- i*<sup>1</sup>. Whiskers long, partially concealing ears; no superciliary fringe . . . . . subsp. *Rothschildi*.
- h*<sup>1</sup>. Skin of face, nails, and underside of hands and feet flesh-coloured, at least the cheeks, throat, tail, and lower half of legs whitish.
- l*. Arms, body, and thighs black . . . . . *congius*.
- l*<sup>1</sup>. Arms, body, and legs mostly greyish white, the arms and shoulders partly ashy black. . . *Hamlyni*.

XXXIX.—*On some Ethiopian Rhynchota, and Synonymical Notes.* By W. L. DISTANT.

THE following descriptions refer to South-African specimens which I have recently received from various sources. Those from the Transvaal will be subsequently figured in 'Insecta Transvaaliensia.'

Fam. Pentatomidæ.

Subfam. PENTATOMINÆ.

*Hermolaus Swierstræ*, sp. n.

Brownish testaceous, coarsely punctate; head with the punctures on lateral lobes arranged in somewhat longitudinal